ARCTIC SOVEREIGNTY AND STRATEGIC INTERESTS: POLICY ANALYSIS

Policy Analysis for the United States Department of State

I. ISSUE BRIEF

The Arctic has undergone a fundamental geopolitical transformation over the past two decades, emerging from a zone of managed cooperation into a theatre of intensifying great power competition. For the United States, this transformation presents both profound strategic opportunities and acute policy challenges that span military security, resource economics, international law, and alliance management. The Arctic Ocean is bordered by five littoral states — the United States, Russia, Canada, Norway, and Denmark (through Greenland) — alongside three additional Arctic Council member states: Finland, Iceland, and Sweden.[1] The United States exercises sovereignty over Alaska's Arctic coastline and the adjacent Beaufort and Chukchi Seas, but critically remains the only Arctic littoral state that has not ratified the United Nations Convention on the Law of the Sea (UNCLOS),[2] a legal anomaly that systematically weakens its capacity to advance territorial and resource claims through multilateral frameworks.

Climate change is the structural driver reshaping the region's strategic calculus. Arctic surface temperatures are rising at approximately four times the global average, a phenomenon scientists term "Arctic amplification."[3] Sea ice extent has declined by approximately 13% per decade since satellite observations began in 1979,[4] and the Arctic Ocean could experience its first ice-free summer as early as the 2030s under high-emissions scenarios.[5] These physical transformations are unlocking access to hydrocarbon deposits estimated at 90 billion barrels of undiscovered oil and 1,669 trillion cubic feet of natural gas — representing approximately 22% of the world's undiscovered conventional hydrocarbon resources.[6] They are simultaneously opening new maritime corridors, most notably the Northwest Passage through the Canadian Arctic Archipelago and Russia's Northern Sea Route, that could reshape global shipping economics.

The post-2022 strategic environment has sharpened these dynamics considerably. Russia's full-scale invasion of Ukraine prompted the Arctic Council — the primary multilateral governance forum for the region — to suspend cooperation with Moscow across all working groups,[7] effectively freezing the institution that had for three decades provided a platform for science diplomacy and environmental management. Simultaneously, Finland and Sweden's accession to NATO in 2023 and 2024 respectively transformed the alliance's Arctic posture, extending its footprint to over 2,500 kilometers of additional Arctic-adjacent territory and bringing two militarily capable Nordic states with sophisticated Arctic operational experience inside the alliance.[8] For Washington, this represents both a strategic windfall and a managerial challenge: a more powerful NATO Arctic flank must be

coordinated, equipped, and governed without precipitating the very escalation it is designed to deter.

The fundamental policy challenge confronting the United States is therefore multidimensional: asserting and defending sovereign rights in the Arctic under a legal framework it has declined to join; competing with a Russia that has invested three decades in Arctic military infrastructure while managing the risk of miscalculation; advancing resource and commercial interests in a region where domestic capacity remains underdeveloped; leading an expanded NATO coalition in the High North; and sustaining credible environmental commitments as the region undergoes irreversible ecological transformation.

II. STRATEGIC INTERESTS

Primary Interests:

Freedom of navigation constitutes the foundational American strategic interest in the Arctic, rooted in both commercial imperatives and the global freedom-of-the-seas doctrine that the United States Navy has enforced as a cornerstone of international order since 1945. The U.S. government formally disputes Russian claims that the Northern Sea Route passages constitute internal waters subject to comprehensive regulation, and equally contests Canada's assertion that the Northwest Passage represents internal Canadian waters.[9] Washington's legal position, articulated consistently across administrations, holds that these passages include international straits through which the right of transit passage applies under customary international law, a position codified in UNCLOS Articles 37–44 — a treaty the United States follows as a matter of customary law while declining to formally accede.[10] This is not an abstract legal dispute. If Russian or Canadian claims were to achieve international acquiescence, the precedent would imperil freedom of navigation in maritime chokepoints globally, from the Strait of Hormuz to the South China Sea, undermining a legal architecture that underwrites American naval primacy.

Arctic territorial and continental shelf rights represent a vital economic and sovereign interest. The United States possesses significant Arctic continental shelf claims in the Beaufort and Chukchi Seas, but without UNCLOS ratification it cannot submit formal extended continental shelf claims to the Commission on the Limits of the Continental Shelf (CLCS), which has received submissions from Russia, Denmark/Greenland, and Canada establishing competing claims over the same seabed.[11] The U.S. Geological Survey estimates that Alaska's North Slope alone contains undiscovered reserves of approximately 29.9 billion barrels of oil and 221 trillion cubic feet of natural gas,[12] resources whose exploitation under clearly defined legal title would generate substantial federal revenue and reduce strategic energy dependencies. The absence of UNCLOS ratification does not extinguish these interests, but it severely constrains the legal tools available to defend them.

Homeland defense and strategic deterrence represent existential American interests in the Arctic. The shortest ballistic missile trajectories between Russian territory and the continental United States traverse the Arctic Ocean and the North Pole.[13] NORAD — the North American Aerospace Defense Command, a binational institution established with Canada — monitors airspace and maritime approaches across the High North, but faces modernization

deficits identified by the commander as significant capability gaps relative to Russian and Chinese advances.[14] The Northern Fleet's ballistic missile submarines (SSBNs), operating from hardened facilities on the Kola Peninsula, represent a substantial portion of Russia's sea-based nuclear deterrent and require sustained American anti-submarine warfare investment to track and deter.[15] Any degradation of American situational awareness in the High North directly compromises extended deterrence commitments to NATO allies.

Secondary Interests:

Alliance leadership and coalition management constitute a substantial secondary interest. The United States is the indispensable actor within the NATO Arctic security architecture, responsible for integrating Norwegian, Danish, Icelandic, and now Finnish and Swedish capabilities into a coherent deterrent posture. The 2024 NATO Summit communiqué explicitly identified Arctic security as a priority domain, and the alliance's new regional defense plans assign specific area responsibilities to member states.[16] American credibility as alliance leader depends in part on demonstrating willingness to invest in Arctic infrastructure — icebreakers, forward basing, surveillance systems — proportionate to the threat environment it publicly characterizes.

Commercial and resource development interests, while secondary to security imperatives, carry significant weight. The U.S. Army Corps of Engineers has documented that the Port of Nome in Alaska represents the only American deep-water Arctic port facility, a logistical constraint that limits civilian and military operations across the entire region.[17] As Arctic shipping lanes become commercially viable — transit times between East Asia and Northern Europe via the Arctic are approximately 40% shorter than routes through the Suez Canal[18] — American commercial shipping interests, insurance underwriters, and port operators require predictable legal frameworks that Washington is presently poorly positioned to shape.

Environmental stewardship, though categorized as secondary in terms of immediate security salience, carries increasing domestic political weight and international legitimacy consequences. The Arctic Council's working groups on Arctic Monitoring and Assessment, Conservation of Arctic Flora and Fauna, and Emergency Prevention, Response, and Preparedness have historically been substantively American-led, producing scientific assessments that undergird international environmental governance.[19] American withdrawal from, or marginalization within, multilateral Arctic environmental frameworks would cede normative leadership to European partners while undermining the domestic credibility of Arctic policy with the Alaskan Indigenous communities — Iñupiat, Yup'ik, Athabascan, Aleut — whose subsistence livelihoods depend on ecosystem stability and whose political consent is constitutionally relevant to resource development decisions.[20]

Tertiary Interests:

Positioning in relation to China's Arctic ambitions represents an emerging tertiary interest with potentially primary long-term consequences. China declared itself a "near-Arctic state" in its 2018 Arctic Policy white paper — a legal designation rejected by the Arctic Eight — and has invested in Arctic research stations, icebreaker construction, and participation in Russian liquefied natural gas projects under the Polar Silk Road framework.[21] While China currently lacks the basing, icebreaking capacity, or alliance relationships that would support independent Arctic power projection, its trajectory of investment and its deepening strategic

partnership with Russia create a compound challenge that American policymakers have been slow to systematically address.

III. CONSTRAINTS

Legal and Institutional Constraints:

The Senate's failure to ratify UNCLOS constitutes the most consequential single constraint on American Arctic policy. The United States signed UNCLOS in 1994 following the adoption of revised deep-seabed mining provisions, and every relevant executive branch agency — the Department of State, the Department of Defense, the Joint Chiefs of Staff, and the National Oceanic and Atmospheric Administration — has formally recommended ratification.[22] Senate opposition, concentrated among a minority of members citing sovereignty concerns, has blocked ratification for over three decades. The practical consequences are severe: the United States cannot submit an extended continental shelf claim to the CLCS, cannot vote or hold seats in CLCS proceedings affecting its claimed areas, and is systematically disadvantaged in multilateral legal forums where other Arctic states advance overlapping claims.[23] The irony is acute — the United States Navy drafted much of the customary international law that UNCLOS codified and relies upon those very provisions to justify freedom of navigation operations that it simultaneously refuses to embed in treaty law.[24]

Domestic statutory constraints further limit Arctic resource development. The Arctic National Wildlife Refuge (ANWR) has been a contested battleground between resource development and conservation interests for decades; leasing authority has oscillated with administrations and faces persistent litigation.[25] The Jones Act (Merchant Marine Act of 1920) requires that goods transported between American ports be carried on American-built, American-flagged, American-owned vessels, a provision that significantly increases Arctic logistics costs given the near-absence of ice-capable American commercial vessels.[26] These legal structures reflect genuine domestic political conflicts that constrain executive latitude substantially.

Military and Operational Constraints:

The United States icebreaker fleet deficit constitutes a critical operational constraint. As of 2024, the U.S. Coast Guard operates two heavy polar icebreakers — *Polar Star* and the newly commissioned *Polar Security Cutter Healy* — with the latter restricted to medium-ice operations.[27] Russia, by contrast, operates a fleet of approximately 46 icebreakers including four nuclear-powered Arktika-class vessels, with additional hulls under construction.[28] This asymmetry is not merely symbolic; it directly limits American capacity for sovereignty presence, search and rescue, environmental response, and military logistics in ice-covered waters. The Polar Security Cutter program, intended to deliver three new heavy icebreakers, has been plagued by construction delays and cost overruns at Halter Marine & Offshore in Mississippi, with delivery timelines repeatedly extended.[29] American dependence on Canadian and allied icebreaking capacity for certain Arctic operations creates sovereign constraints that no treaty provision can fully compensate.

NORAD modernization requirements create budgetary pressure within an already strained defense investment environment. The bi-national command's existing North Warning System was designed to detect bomber threats from the Cold War era and lacks adequate capability to track hypersonic missiles, low-observable cruise missiles, and the full range of modern Russian and Chinese delivery systems that could approach North America via Arctic trajectories.[30] The 2021 NORAD and USNORTHCOM commander's posture statement identified High North awareness as a critical deficit, and the 2022 National Security Strategy acknowledged the "emerging threat environment in the Arctic."[31] The Department of Defense's Arctic Strategy of 2019 outlined an "eyes open" to "assertive" progression, but resource allocation has not matched rhetorical ambition.

Diplomatic and Alliance Constraints:

The tension between American freedom of navigation positions and allied legal interpretations creates intra-alliance friction that limits diplomatic maneuver. Canada's claim that the Northwest Passage constitutes internal Canadian waters is directly contradicted by the American position that transit passage rights apply — a dispute managed but not resolved under the 1988 Arctic Cooperation Agreement, which facilitated U.S. icebreaker transits while explicitly leaving the underlying legal question unresolved.[32] Norwegian disagreements over the legal status of fishing rights in the Svalbard zone present similar complexities.[33] Washington cannot simultaneously demand allied solidarity against Russian and Chinese revisionism while appearing indifferent to the legal positions of those same allies.

Alaskan Indigenous rights create both a political and a legal constraint on resource development and military basing decisions. The Alaska Native Claims Settlement Act of 1971 established a framework for Indigenous land rights, but subsequent litigation over subsistence rights, environmental impact review obligations, and consultation requirements under the National Environmental Policy Act and the National Historic Preservation Act creates procedural complexity that significantly extends permitting timelines for any Arctic development.[34] The federal trust responsibility to Alaska Native communities is not merely a political consideration; it constitutes a binding legal obligation that constrains executive agency discretion.

Economic and Industrial Base Constraints:

American commercial Arctic capacity is comprehensively underdeveloped relative to the strategic ambitions successive administrations have articulated. The domestic shipbuilding industry, constrained by the Jones Act's requirements, lacks the industrial capacity to produce Arctic-capable vessels at competitive cost and schedule.[35] American energy companies withdrew from major Arctic offshore drilling programs — Shell's Chukchi Sea operations were suspended in 2015 following a $7 billion investment — partly due to cost structures that proved uncompetitive relative to onshore alternatives and partly due to regulatory uncertainty.[36] Arctic logistics infrastructure across the Alaskan North Slope — roads, ports, pipelines, airfields — reflects the investment decisions of the mid-twentieth century and requires massive capital infusion to support twenty-first century operational requirements.

IV. POLICY OPTIONS

Option A: Assertive Unilateralism Through Capability-Led Presence

Pursue a strategy of demonstrating Arctic sovereignty and deterrence primarily through unilateral American capability investment, reduced engagement with multilateral governance frameworks, and aggressive freedom of navigation operations. Under this approach, the United States would dramatically accelerate the Polar Security Cutter program by engaging foreign shipyards to circumvent Jones Act limitations, conduct regular warship transits of both the Northwest Passage and the Northern Sea Route to challenge Russian and Canadian legal positions, expand military basing in Alaska and potentially Greenland, decline further Arctic Council engagement given Russian participation, and resist UNCLOS ratification as a compromise of domestic sovereignty.

Assessment: This approach offers coherent signaling of American resolve and avoids the Senate ratification battle that has frustrated executive branch preferences for three decades. Expanded freedom of navigation operations would directly challenge Russian and Canadian legal overreach and generate intelligence collection opportunities. However, the strategic costs are prohibitive. Conducting warship transits of the Northwest Passage over explicit Canadian objection risks a rupture with Washington's closest ally and Five Eyes partner, creating a bilateral crisis that Russia and China would exploit with alacrity. Declining Arctic Council engagement cedes environmental governance to European-led frameworks and generates domestic political costs with Alaskan constituencies. Circumventing the Jones Act requires legislation and faces powerful union opposition. Most consequentially, unilateral capability development without the legal architecture of UNCLOS leaves American continental shelf claims perpetually vulnerable to being superseded by Russian and Danish CLCS submissions. Historical precedent — the South China Sea arbitration, the Law of the Sea Tribunal — demonstrates that states which decline to engage multilateral legal processes forfeit the normative advantages those processes can generate, a lesson Washington would be wise to internalize.

Option B: Comprehensive Multilateral Engagement Through UNCLOS Ratification and Arctic Institutionalism

Pursue a strategy centered on UNCLOS ratification, active CLCS submission, revitalized Arctic Council participation conditioned on Russian behavioral standards, and deep alliance burden-sharing arrangements. This would involve a sustained White House legislative strategy to secure the two-thirds Senate majority required for UNCLOS ratification, submission of an extended continental shelf claim following ratification, restoration of full Arctic Council functionality when Russian behavior permits, and negotiation of binding Arctic search-and-rescue and environmental liability conventions.

Assessment: UNCLOS ratification would be transformative for American legal standing in the Arctic, enabling formal continental shelf claims worth potentially trillions in seabed resource rights and embedding U.S. navigation positions within enforceable treaty law. The Joint Chiefs, NOAA, and State Department support this position for these reasons. However, the political pathway faces severe obstacles. Senate ratification requires 67 votes, and the relevant opposition has proven durable across Republican and Democratic administrations alike, grounded in deep-seated constitutional sovereignty concerns that no executive

argument has successfully overcome in three decades of effort.[37] Moreover, conditioned Arctic Council re-engagement with Russia following the 2022 invasion faces legitimate objections from NATO allies — particularly the Baltic states and Finland — who view any premature normalization as rewarding aggression. This option is strategically optimal but politically unrealistic under current domestic conditions, making it a long-term objective rather than an immediately actionable strategy.

Option C: NATO Arctic Integration as the Primary Strategic Vector

Prioritize Arctic security through deep NATO institutional integration — establishing a dedicated NATO Arctic command structure, negotiating pre-positioned capability agreements with Norway and Denmark, integrating Finnish and Swedish Arctic forces into High North defense plans, and pressing allies to meet specific Arctic capability benchmarks within the broader 2% GDP defense spending commitment framework. Under this approach, multilateral Arctic governance would be managed primarily through the NATO political framework rather than the Arctic Council, with Russia excluded until and unless Ukraine is resolved on acceptable terms.

Assessment: NATO integration leverages the extraordinary expansion of the alliance's Arctic posture following Finnish and Swedish accession and capitalizes on genuine allied convergence around the Russian threat assessment in a way not seen since the Cold War's height. Norway's operational expertise, Finland's 1,340-kilometer border experience, and Sweden's Baltic maritime capabilities represent strategic assets that a dedicated command structure could genuinely optimize. However, this option carries meaningful liabilities. Subordinating Arctic governance entirely to NATO risks alienating Canada, which participates in Arctic governance through the Council but has historically maintained ambivalence about NATO's role in the High North to preserve its special relationship with Arctic Indigenous communities and to avoid militarizing bilateral resource disputes. It also conflates the security and environmental governance functions of Arctic institutions in ways that produce policy incoherence — climate science, search-and-rescue coordination, and Indigenous representation cannot be meaningfully conducted through a military alliance framework. Furthermore, a purely NATO-centric approach forecloses the possibility of limited Arctic cooperation with Russia on genuine humanitarian imperatives — oil spill response, mass rescue operations, climate monitoring — where even adversarial relationships have historically permitted functional engagement.

Option D: Calibrated Multilateralism — Legal Foundation Building with Credible Deterrence

Implement a differentiated strategy that pursues UNCLOS ratification as a sustained legislative priority, maintains credible Arctic military capabilities through allied burden-sharing rather than unilateral investment alone, selectively re-engages multilateral governance frameworks on humanitarian and scientific issues where Russian participation serves American interests, and advances a distinct counter-China Arctic strategy separate from the Russia deterrence framework.

Assessment: This approach is analytically coherent and operationally realistic, though it demands sustained political discipline that inter-agency competition and electoral cycles frequently undermine. UNCLOS ratification should be framed not as a concession to internationalism but as a mechanism for locking in American continental shelf claims against

Russian and Danish submissions proceeding without American input — an argument that could attract Republican votes by emphasizing resource sovereignty rather than institutional deference. Allied burden-sharing on icebreakers, radar systems, and forward basing reduces the fiscal pressure of unilateral investment while generating collective deterrence more credibly than American forces alone. Selective multilateral engagement — specifically on climate monitoring, search-and-rescue, and Indigenous peoples' forums — preserves American normative leadership and creates issue-linkage channels with Russia that help manage escalation risk without legitimizing the Ukraine invasion. Treating the China Arctic problem as analytically distinct from Russia prevents the strategic error of conflating two different challenge sets with incompatible policy responses.

V. RISK ASSESSMENT AND RECOMMENDED COURSE OF ACTION

Recommended Strategy: Option D — Calibrated Multilateralism with Credible Allied Deterrence

This strategy optimally balances the structural constraints on American Arctic policy — the UNCLOS ratification deficit, the icebreaker gap, the domestic political divisions over resource development — against the genuine strategic interests at stake in the High North. It avoids the twin pathologies of assertive unilateralism, which alienates indispensable allies, and comprehensive multilateralism, which is presently politically infeasible, in favor of incremental legal foundation-building combined with immediate deterrence investments that do not await legislative resolution.

Implementation Framework:

The UNCLOS ratification campaign should be relaunched as a resource sovereignty initiative rather than an institutional obligation argument. The administration should commission and publicly release a classified-to-unclassified assessment of the seabed resource value potentially subject to competing Russian and Danish CLCS claims in areas where the United States cannot submit counter-claims absent ratification. This reframing has repeatedly been identified by former Senate Republican staff as the most plausible path to moving votes in the Foreign Relations Committee.[38] Simultaneously, the State Department should maintain continuous diplomatic engagement with the CLCS to ensure that existing Russian and Danish/Canadian submissions do not receive approval in American-claimed areas without triggering formal diplomatic objection — a procedural tool that does not require ratification but preserves options.

The icebreaker deficit demands immediate remedial action. The Polar Security Cutter program should be restructured to permit partial foreign construction of hull sections — invoking national security waivers to the Jones Act already available under 46 U.S.C. § 55107 — to achieve earlier delivery without abandoning the domestic industrial base objectives that drive the Act's political support.[39] Finland and Norway, which possess world-class icebreaker construction industries, should be engaged through the NATO industrial cooperation framework for both technology transfer and potential co-production arrangements. The Coast Guard's operational Arctic presence should be enhanced

immediately through leasing or chartering agreements with allied icebreaking operators on the model used for Antarctic logistics.

NORAD modernization must proceed on the timeline the threat environment demands, not the procurement system's convenience. The 2021 bipartisan defense budget authorization included $100 million specifically for NORAD modernization,[40] but this represents a fraction of the investment required to close the High North surveillance gap identified by successive commanders. Canada should be pressed, within the NORAD renewal negotiations, to commit to specific capability investments on its Arctic territories proportionate to the shared threat. The joint American-Canadian nature of NORAD provides a pre-existing institutional framework for this burden-sharing conversation that does not require new treaty architecture.

On alliance management, the United States should resist the temptation to treat every Arctic policy question as a NATO matter. Canada's distinct sensitivities around the Northwest Passage, Indigenous rights, and the civilian character of Arctic governance require bilateral diplomatic management rather than multilateral homogenization. The 1988 Arctic Cooperation Agreement framework should be updated to clarify vessel categories and transit procedures in ways that reduce friction without conceding the underlying legal positions of either party. Norwegian and Danish concerns about Russian conventional military superiority in their immediate Arctic neighborhoods require American forward posture commitments — potentially including rotating Air Force deployments to Greenland's Pituffik Space Base and pre-positioned Army equipment in northern Norway — that reassure without constituting a permanent escalatory posture.

The China Arctic dimension requires a distinct policy track. Washington should lead a "like-minded Arctic states" dialogue — encompassing the NATO Arctic allies plus Japan, South Korea, and Australia — specifically addressing Chinese Arctic investment patterns, CLCS process participation, research station activities, and Polar Silk Road infrastructure financing. This coalition-building should be distinguished from the Russia deterrence track to avoid the confusion that comes from treating Arctic governance as a single unified challenge with a single unified adversary.

Risk Mitigation:

The primary escalation risk in the Arctic is inadvertent — a naval incident, a disputed intercept, an ambiguous act of sovereignty assertion that triggers a response disproportionate to the original provocation. The absence of bilateral U.S.-Russia Arctic incident-at-sea communication channels is a documented deficit.[41] The United States should propose their restoration through existing bilateral diplomatic architecture, conditioned not on broader normalization but on the mutual interest both states share in avoiding nuclear escalation over an Arctic miscalculation.

Domestically, the political risk of Arctic policy overreach — committing to infrastructure investments that future Congresses defund, or making territorial claims that domestic constituencies contest — requires active management through Alaskan congressional delegation engagement and continuous consultation with the Alaska Federation of Natives. The legal obligation of consultation with federally recognized Alaska Native tribes under the National Environmental Policy Act and the federal trust responsibility is a floor, not a ceiling;

politically sustainable Arctic policy requires consent-building beyond minimum statutory compliance.[42]

The long-term energy transition risk — that Arctic hydrocarbon investments become stranded assets as global decarbonization accelerates — counsels against committing public capital to offshore oil and gas development that depends on multi-decade price environments that may not materialize. American Arctic strategy should prioritize sovereign rights establishment and military security over aggressive resource development pacing, recognizing that clearly defined legal title is an asset that persists regardless of whether hydrocarbons are ultimately extracted.

This framework positions the United States to defend its core Arctic interests — freedom of navigation, homeland defense, continental shelf rights, and alliance leadership — while managing the legal deficit created by UNCLOS non-ratification, the operational deficit created by the icebreaker gap, and the diplomatic challenge created by the need to simultaneously deter Russia, manage allied friction, and address China's emerging Arctic ambitions. Success requires sustained inter-agency coordination, patient Senate diplomacy, and the willingness to accept incremental legal and operational progress in place of the decisive strategic clarity that the Arctic's growing importance increasingly demands but that American domestic politics has so far declined to provide.[43]

FOOTNOTES

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[41] Incidents at Sea Agreement, U.S.-U.S.S.R., May 25, 1972, 23 U.S.T. 845; *see* Michael Byers & James Kraska, *Preventing Incidents at Sea in the Arctic*, BELFER CENTER ARCTIC SECURITY PROJECT (2023) (noting the absence of updated protocols covering Arctic operations).

[42] Executive Order 13,175, *Consultation and Coordination with Indian Tribal Governments*, 65 Fed. Reg. 67,249 (Nov. 6, 2000); ALASKA FEDERATION OF NATIVES, *Federal Trust Responsibility and Arctic Policy* (2023).

[43] This framework draws on SCOTT BORGERSON, *THE COMING ARCTIC BOOM*, 92 FOREIGN AFF. 76 (2013); JAMES STAVRIDIS, SEA POWER: THE HISTORY AND GEOPOLITICS OF THE WORLD'S OCEANS 282–310 (2017); and ROB HUEBERT ET AL., CLIMATE CHANGE AND INTERNATIONAL SECURITY: THE ARCTIC AS A BELLWETHER (2012).